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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,012	01/16/2004	Tomoyuki Kojima	0051-0217P	5749
2292 7590 09/11/2008 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747				
EXAMINER MCALISTER, WILLIAM M				
ART UNIT		PAPER NUMBER		
3753				
NOTIFICATION DATE		DELIVERY MODE		
09/11/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/758,012

Applicant(s)

KOJIMA ET AL.

Examiner

WILLIAM MCCALISTER

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 5/7/2007.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what spatial relationship is required of the following language: "...disposed on the side of the vacuum generation mechanism of the conveyor table", as recited by claim 3. Specifically, "*of the* conveyor table" cannot be read as a further description of "the vacuum generation mechanism", since claim 2 requires the conveyor table to be a component of the vacuum leak generation part, which, as required of claim 1, is distinct from the vacuum generation mechanism.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

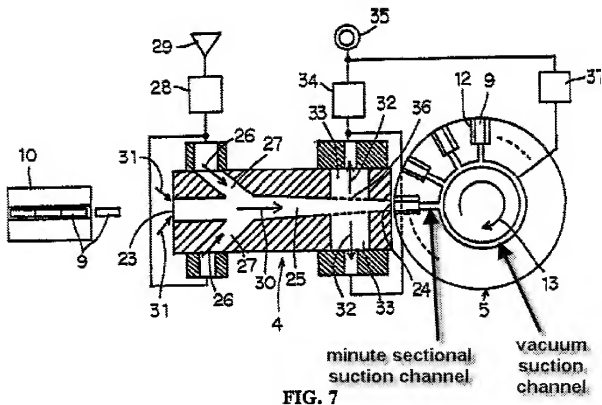
2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Arishiro (US Patent Application Publication 2001/0008061).

Regarding claim 1, Arishiro discloses a vacuum suction system, comprising a vacuum leak generation part (5, 12), a vacuum generation mechanism (35) connected to the vacuum leak generation part, and a vacuum level adjustment mechanism (33, 34) connected to the vacuum generation mechanism to adjust a vacuum level of the vacuum leak generation part.

Regarding claim 2, Arishiro discloses the vacuum leak generation part to include a conveyor table (5) having a work receiving opening (12) for receiving a work (9).

Regarding claim 3, as best understood Arishiro discloses the vacuum leak generation part to include a table base (that portion of the table 5 which defines the channels that are illustrated in FIG 7) disposed on the side of the vacuum generation mechanism of the conveyor table, with a vacuum suction channel (see annotated FIG 7, below) to connect with the work receiving opening.

Regarding claim 4, as best understood, Arishiro discloses a minute sectional suction channel (see annotated FIG 7 below) to be located between the vacuum suction channel and the work receiving opening on the side of the table base of the conveyor table.



3. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Mori (US Patent 5,191,218).

Regarding claim 1, Mori discloses a vacuum suction system, comprising a vacuum leak generation part (106), a vacuum generation mechanism (117) connected to the vacuum leak generation part, and a vacuum level adjustment mechanism (115b, 116a) connected to the vacuum generation mechanism to adjust a vacuum level of the vacuum leak generation part.

Regarding claim 2. Mori discloses the vacuum leak generation part to include a conveyor table (106) having a work receiving opening (106.sub.2) for receiving a work (105).

Claims 7, 8 and 9 are anticipated by Mori because the method claimed would necessarily be performed during the normal and usual operation of Mori's device (for discussion of the control function see the analyses of claims 5 and 6 below). For a discussion of anticipation of a process claim by a disclosed apparatus, see *In re King*, 801 F.2d 1324, 231 USPQ 136 (Fed. Cir. 1986). Regarding claim 9, because the process performed by Mori's device is cyclical, the expulsion of compressed air would occur intermittently.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori.

Regarding claim 5, Mori also discloses a negative pressure sensor (113a) to detect the vacuum level of a vacuum leak generation part (106), a compressed gas generation source (116a) for generating a compressed gas, and an adjustment part (115b) to jet out the compressed gas from the compressed gas generation source to the vacuum leak generation part based on a signal from the negative pressure sensor (see col. 9 lines 38-42). Mori does not disclose the compressed gas to be air. To decrease the cost of operating Mori's suction system, it would have been obvious to one of ordinary

skill in the art at the time of invention to use air as the operative gas rather than helium, since it was known that air is transmissive to X-ray and light treatment operations.

Regarding claim 6, Mori discloses the adjustment part to jet out the compressed air based on the signal from the negative pressure sensor when the vacuum level rises above a maximum level, and to stop the compressed air when the vacuum level falls below a minimum level (this function is implied by the fact that pressure in passageway 111 is maintained constant by control of valve 115b, see col. 10 lines 23-32).

Conclusion

8. The prior art made of record but not relied upon which is considered pertinent to applicant's disclosure is: US Patent 6,448,525, which discloses a similar holding device that utilizes a vacuum source and compressed gas source; and US Patent 5,961,169 which discloses a similar holding device that uses a vacuum pressure sensor for confirming the holding state of the device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM MCCALISTER whose telephone number is (571)270-1869. The examiner can normally be reached on Monday through Friday, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WILLIAM MCCALISTER/
Examiner, Art Unit 3753

/Stephen M. Hepperle/
Primary Examiner, Art Unit 3753

WM
9/4/08